

REMARKS

Claims 1-6, 9 and 13-25 are pending in the current application. Claims 1 and 2 are amended.

Claim Rejections – 35 U.S.C. § 112

Claim 9 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. The Examiner questions whether or not the “main body portion” of line 11 is another name for the bush body 10. The Examiner alleges that there is at least an implication that the bush part is part of the “main body”, which is assumed to be the overall valve house.

Applicant respectfully disagrees with the Examiner’s assertion that claim 9 fails to particularly point and distinctly claim the subject matter which Applicant regards as the invention and respectfully requests that the 35 U.S.C. § 112 rejection be withdrawn.

In short, the “main body portion” of line 11 refers to a portion of an “insert reinforcing means.” As claimed in claim 9, the insert portion reinforcing means comprises at least three parts: 1) a main body portion (Examiner’s referenced bush body); 2) a thread mechanism portion; and 3) a thread-advance preventing portion. The only portion of the “insert reinforcing means” which can be assumed to be part of the valve “main body” is the thread advance portion.

As stated in claim 9, the purpose of the “thread mechanism portion” is to “supply a driving force to the main body portion toward one side in the axis direction.” The thread mechanism portion “has an inner threaded portion that is formed integrally with the inner circumferential portion of the cylinder insert portion, and an outer threaded portion that is formed integrally with the outer circumferential portion of the main body portion and that is thread-engaged with the inner threaded portion.” From the above discussion of claim 9, we

know that the “thread mechanism portion” is integral to both the valve main body and the “main body portion” of the “insert reinforcing means.” But we also know that the “main body portion” of the “insert reinforcing means” is not integral with the valve main body. If the “main body portion” of the “insert reinforcing means” were integral with the valve main body then the “thread mechanism portion” would not be able to perform its task of supplying a driving force to the main body since all three members would exist in unity. Therefore, it is clear^l that the “main body portion” of the “insert reinforcing means” cannot be integral with the valve main body and thus, in answer to the Examiner’s inquiry, the main body portion is not part of the overall valve housing.

For the reasons stated above, the applicant disagrees with the Examiner’s assertion that claim 9 fails to particularly point and distinctly claims the subject matter which Applicant regards as the invention and respectfully requests that the 35 U.S.C. § 112 rejection be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-6, 13-18, and 20-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Higaki et al. (JP 10-339383, hereinafter Higaki) in view JP 55-20103 or Kelly et al. (hereinafter Kelly). This rejection is respectfully traversed.

The Examiner argues that “[i]t would have been obvious to form the two housing parts of the Higaki housing as a single housing member, as there is no relative motion between the two parts (leaving the cap as separable for service work).” Applicant disagrees.

MPEP 2143 states that the teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art, not in applicant’s

disclosure. In the present case the examiner has not provided prior art which would suggest combining the two housing members into a single unit, nor has the Examiner provided a reason for combining the two units. Absent such a showing, the Examiner cannot show obviousness.

The Examiner also argues that “it would have been obvious in view of JP ‘103 document to provide tapered abutting surfaces on cap 3 and the main body of Higaki in order to provide an additional seal to the o-ring 8.” Although the Examiner provided some alleged reason to combine the ‘103 patent with Higaki (to provide an additional seal to the o-ring) the Examiner did not specify how the prior art could be combined. Applicant respectfully requests that the Examiner clearly point out what features in ‘103 can be combined with Higaki in order to arrive at the tapered cap.

Claim 1 is amended into include “a single fluid guiding port to guide fluid from the center of the main body to the valve outlet.” This feature is not taught in either Hagaki, Kelly, or the JP ‘103 patent. A conventional fluid port design is shown in Figure 15 of the present application. The conventional design is different from that being claimed in claim 1 in that it consists of several fluid guiding ports and one fluid guiding groove. Assuming one skilled the art would combine Higaki, Kelly or the JP ‘103 with the conventional fluid port design as shown in figure 15, the combination would not result in a “a single fluid guiding port to guide fluid from the center of the main body to the valve outlet” as claimed in claim 1.

For the reasons stated above the applicant respectfully requests that the 35 U.S.C. § 103(a) rejections for claim 1 and all claims which depend thereon be withdrawn.

For similar reasons we request that the 35 U.S.C. § 103(a) rejection of claim 2 and all claims which depend thereon be withdrawn as well.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Higaki in view of Kabushiki (JP 3058841, hereinafter Kabushiki). This rejection is respectfully traversed.

The Examiner cites figure 2 of Kabushiki in an attempt to render the insert of claim 9 obvious. However, figure 2 merely shows a pressure reducing device with an insert. The figure does not show or teach threading or suggest how the insert is coupled to the main body of the pressure reducing device. Therefore, even if one were to combine Kabushiki with Higaki one would still not arrive at a rapidly opening pressure regulating valve with an insert portion reinforcing means with a “thread mechanism portion” as claimed in claim 9.

Even if one were to assume the cylinder insert of Kabushiki’s figure 2 was connected to the pressure reducing device via threading, and assumed that this arrangement would work with the Higaki valve, the arrangement is different from that being claimed in claim 9. Kabushiki’s figure 2 would imply that the thread mechanism portion be placed on the insert near the stopping flange. Claim 9, however, claims a “thread mechanism portion provided on one side in the axis direction of the boundary” and a “thread-advance preventing portion provided on the other side in the axis direction of the boundary” so that the insert portion reinforcing means “reinforces a portion including a vicinity of the boundary by making the cylinder insert portion into a compressed state.” Therefore, even if one were to combine Kabushiki with Higaki one would arrive at an arrangement with a “thread mechanism portion” near the stopping flange which is different from that being claimed in claim 9. As such, applicant respectfully requests that the 103(a) rejection of 9 be withdrawn.

CONCLUSION

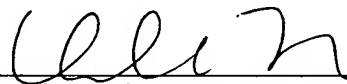
Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-6, 9 and 13-25 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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